Kentucky Prepares

Pandemic Influenza Planning

January 20, 2006

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Integrating Levels of Response Plans

- International: WHO Pandemic Influenza Plan
- National: HHS Pandemic Influenza Plan (11/05)
- State: Kentucky's Pandemic Influenza Plan (since 2003 and updated regularly)
- Local: local health departments, communities, and HRSA planning regions
- Individual: citizens' and families' plans



All-Hazards Approach to Planning in KY

- Pandemic plans are a subset of State/Local Public Health's <u>Disaster Response and</u> <u>Recovery Plan</u>
- Flexible, yet comprehensive plans
- Plans must be exercised and updated, not left on a shelf
- Pandemic planning is the "ultimate plan": if prepared for a pandemic, we can respond to any communicable disease threat



Planning Assumptions

- Pandemic is NOT preventable
- Universal susceptibility to novel virus
- Pandemic outbreak will last 6 8 weeks
- Multiple (2 3) pandemic waves are likely
- Clinical disease attack rate
 - up to 30%children (40%); adults (20%)



Planning Assumptions

Half of those ill seek outpatient medical care

 Hospitalization/death rates up to 10-fold variation depending upon virulence of virus

 Demand for services will exceed supply, nontraditional interventions may be required



Possible Impact of Pandemic in KY*

Health

- Deaths: 3000 7000
- Hospitalizations: 9,200 21,400
- Outpatient visits: 455,000 1.06 million

Economic

- Infrastructure: Thousands at home either ill or caring for the ill
- Agricultural: if pandemic strain is avian flu

*Model assumes attack rates of 15-35 % and is based on the 1968 pandemic, and a US population of 290 million persons. Meltzer M, et al. Emerging Infectious Diseases 1999;5:659-671.

Cabinet for Health and Family Services

Key Components of Pandemic Planning

- Surveillance systems
- Quarantine / isolation procedures
- Public health personnel (staff + training)
- Medical surge capacity (staff + equipment)
- Predetermined Priority Groups as antivirals drugs and/or vaccine becomes available
- Distribution systems (e.g. Strategic National Stockpile)
- Government / Business contingency plans



Pandemic Planning Committee

- From CHFS (28):
- Director of Div. of Epi.
- Preparedness Branch (9)
- Communicable Dis. Br. (5)
- Immunization Br. (3)
- Lab (3)
- CDC Epidemiologist
- DPH Veterinarian
- Vital Statistics (2)
- Local Health Operations
- Public Health Protection and Safety
- Div. of Communications
 Cabinet for Health and Family Services

- Other agencies (14):
- Local Health Dept. (3)
- KyEM (2)
- KOHS
- UK
- UL
- Lexington MMRS
- Louisville MMRS
- Northern KY MMRS
- US Army (Fort Campbell)
- Justice Cabinet
- State Representative



DPH Flu Surveillance Activities

- Kentucky state statutes require reporting of communicable diseases to DPH
 - Reports are analyzed by regional epidemiologists and by local "Epidemiology Rapid Response Team" members
- Participation in the "122 Cities Influenza and Pneumonia Mortality System"
- Participation during flu season in the "State and Territorial Epidemiologists Report"



DPH Flu Surveillance Activities

 Each week, 11 Kentucky "Sentinel physicians" and 20 local sentinel health departments report influenza-like illnesses to DPH and we report to CDC

 DPH Lab is one of 75 "WHO Collaborating Laboratory Surveillance" facilities



Kentucky's Strengths

- Long tradition of collaboration across a tightly knit state: state/local and public /private health
- "Pop Quizzes" test our response plans: West Nile virus, anthrax threats, SARS, tornados, chemical spills, Katrina, etc...
- Innovations in Public Health Information technology: telehealth, Health Alert Network, and e-Health Board
- Strategic National Stockpile plan (CDC telecast 4/05)



Collaborative Planning Partners

- State and Local Public Health
- Private Healthcare professionals (hospitals, physicians, pharmacist, EMS, etc.)
- Kentucky Emergency Management (state/local)
- Kentucky Department of Agriculture
- Kentucky Office of Homeland Security
- Kentucky Law Enforcement (Justice Cabinet)
- Government Officials (state/local)
- Kentucky National Guard (41st Civil Support Team)



Bioterrorism Advisory Committee

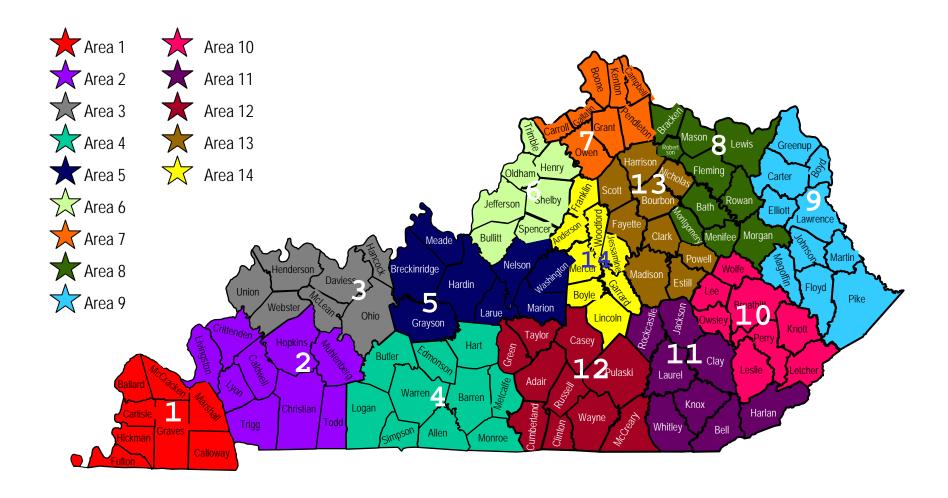
- State/Local Public Health
- Hospitals
- Physicians
- Academic Medical Centers
- KY EMS
- Kentucky Veterinary Medical Association
- Dept. of Agriculture
- KyEM
- KY Office of Homeland Security
- American Red Cross
- Primary Care Association

- Office of Rural Health
- KY Community Crisis Response Board
- Dept. for Local Government
- Office of Aging
- KY Labor Cabinet
- Natural Resources and Environmental Protection Cabinet
- Kentucky Fire Commission
- VA and Fort Knox
- MMRS Regions
- HRSA Advisory Committee



Cabinet for Health and Family Services

HRSA Regions





Challenges

- Some decisions cannot be made until the science (epidemiology) of the actual pandemic unfolds
- Unknown if antiviral drugs will be effective
- Likely limited availability of effective vaccine early in pandemic; priority groups a necessity
- Surge capacity limited; must depend on routine public health interventions, for example...



Challenges

- "Social Distancing"
 - sheltering at home a "snow day" concept, telecommuting to work/school
- Successful response requires plans that work--plans must be tested and updated regularly



Lessons Learned from Recent Events

- Public may not prepare even if repeatedly warned
- Real disasters may be worse than expected
- Outside help may be delayed in coming
- Concerns over health and safety of their family will affect responders
- Communications and logistics are critical success factors
- Impact may be both medical and economic



How every Kentuckian can prepare...

Advice for both seasonal and pandemic influenza

- Develop an "all hazards" emergency preparedness family plan
- Get a flu shot each fall
- Wash hands frequently
- Cough / sneeze into tissue or elbows
- Avoid crowds during outbreaks
- If sick stay home from work / school



A Pandemic Effect on Kentuckians

- Goal: prevent illness and death, and preserve critical community infrastructures
- Mother Nature does not "aim"; all are at risk
- The public/private health care system can not protect us from a pandemic
- We must respect the potential impact a Pandemic poses to all parts of society
- Therefore <u>all sectors</u> must participate in planning, exercising, and responding

Closing Thoughts

- A pandemic does not appear imminent at this time
- Do not panic, but do get prepared
- Another pandemic will occur, we just don't know when
- A prepared community is stronger
- Next step: engage with your local health department to hold a community wide summit to address these issues

